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d) On pose $\begin{cases} x = m-1 \\ y = m+1 + \frac{1}{m-2} \\ m > 2 \end{cases}$

$\Leftrightarrow \begin{cases} m = x+1 \\ y = x+2 + \frac{1}{x-1} = f(x) \\ x+1 > 2 \end{cases}$

$\Leftrightarrow \begin{cases} x > 1 \\ y = f(x) \end{cases}$ $\Leftrightarrow$ E la partie de C_f tel que $x > 1$

2/ $g(x) = x^3 - 2x^2 + 2x + 1$

a) g dérivable sur $\mathbb{R}$ et $g'(x) = 3x^2 - 4x + 2$

$\Delta' = (-2)^2 - 3(2) = -2 < 0$

x	$-\infty$		$+\infty$
$g'(x)$		$+$	
g	$-\infty$	↗	$+\infty$

$\lim_{-\infty} g(x) = \lim_{-\infty} x^3 = -\infty$

$\lim_{+\infty} g(x) = \lim_{+\infty} x^3 = +\infty$

b) $g(x) - f(x) = x^3 - 2x^2 + 2x + 1 - (x+2) - \frac{1}{x-1}$

$= x^3 - 2x^2 + x - 1 - \frac{1}{x-1}$

$= \frac{x^4 - 2x^3 + x^2 - x - x^3 + 2x^2 - x + 1 - 1}{x-1}$

$= \frac{x^4 - 3x^3 + 3x^2 - 2x}{x-1}$

or $(x^2 - 2x)(x^2 - x + 1) = x^4 - x^3 + x^2 - 2x^3 + 2x^2 - 2x$

$= x^4 - 3x^3 + 3x^2 - 2x$

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